

## ABSTRACT OF THE DISCLOSURE

A novel human sodium phosphate cotransporter expressed on the apical surface of intestinal epithelial cells (huNpt2B) and polypeptides related thereto, as well as nucleic acid compositions encoding the same, are provided. The subject polypeptides and nucleic acid compositions find use in a variety of applications, including research, diagnostic, and therapeutic agent screening applications. Also provided are methods of inhibiting Npt2B activity in a host and methods of treating disease conditions associated with Npt2B activity.